DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027343
Date Inspected: 19-Mar-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

5W PP29.5 W2-DAH (Exterior)

This QA Inspector randomly observed ABF Quality Control Inspectors John Pagliero and Jesse Cayabyab performing Magnetic Particle (MT) inspection and Ultrasonic Testing (UT) inspection on the Deck Access Hole at 5W PP29.5 W2 on the exterior of the OBG. This QA Inspector observed that no rejectable MT or UT indications were found. The weld area scanned was 20mm thick.

This QA Inspector performed a MT Inspection on the DAH at 5W PP29.5 W2 on the exterior of the OBG. This QA Inspector performed the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed a UT inspection on approximately 10% of the welds on the DAH on the exterior of the OBG. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in

compliance with the contract specifications.

5W PP29.5 W2-LSE (Interior)

This QA Inspector randomly observed ABF Quality Control Inspector John Pagliero perform an MT inspection and a UT inspection on the East Longitudinal Stiffener (LSE) at 5W PP29.5 W2 on the interior of the OBG. This QA Inspector observed that no rejectable MT or UT indications were found. The weld area scanned was 30mm thick.

This QA Inspector performed a MT Inspection on the LSE at 5W PP29.5 W2 on the interior of the OBG. This QA Inspector performed the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed a UT inspection on approximately 10% of the welds on the LSE on the interior of the OBG. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1. 5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

8W PP70.5 W2-DAH (Interior)

This QA Inspector randomly observed ABF welder Eric Sparks perform back gouging operations on face “B” of the DAH located at 8W PP70.5 W2 on the interior of the OBG. The welder was observed grinding the weld with a small disc grinder as well as utilizing the Carbon Air Arc Method to achieve the desired depth and joint geometry. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress.

9W PP84.5 W2 LS-E (Interior)

This QA Inspector randomly observed ABF welder Mike Jimenez performing the Shielded metal Arc Welding (SMAW) process in the 3G vertical position on the LS-E of the DAH located at 9W PP84.5 W2 on the interior of the OBG. Mr. Jimenez was observed utilizing 3.2mm E9018-H4R electrodes with amperage of 126 and this QA Inspector verified that they were secured from a remote baking oven in the general vicinity. It was noted that a Pro-Heat induction heating system was incorporated to provide continuous heat throughout the shift and the welder was observed grinding and blending the start/stop edges of the work with a small disc grinder and a die grinder. QC Steve Jensen was observed monitoring the welding and the parameters to ensure compliance with ABF-WPS-D1.5-1110A-Revision 0 and this QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress.

9E PP84.5 E5-DAH (Exterior)

This QA Inspector at random intervals, Observed ABF welder Todd Jackson pre-heat the B-U3-GF Complete

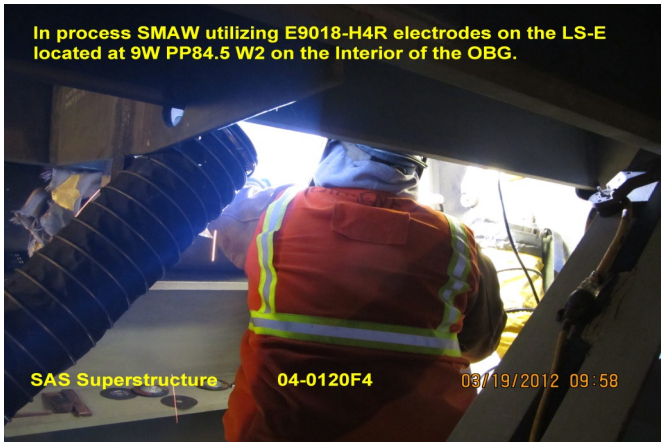
penetration Joint (CJP) to a minimum of 70° F prior to performing Flux Core Arc Welding (FCAW) in the 1G flat position on the DAH at 9E PP84.5 E5 on the exterior of the OBG. The welder was observed cleaning the work between passes utilizing a small disc grinder, brushes and compressed air. QC Inspector Steve Jensen was observed monitoring the welding and was present on subsequent observations by this QA Inspector. The parameters were recorded as; Amps=296, Volts=24.8, Travel Speed=350 for a Heat Input of 1.26. This QA Inspector noted that the work was in progress and appeared to be in general conformance with ABF-WPS-D1. 5-3010-1 and the contract specifications.

13E PP122.5 E4 Lifting Lug Holes #1-4 (Exterior)

This QA Inspector performed a UT inspection on approximately 10% of the welds on the Lifting Lug Holes #1-4 on the exterior of the OBG located at 13E PP122.5 E4. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Summary of Conversations:

As noted above.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer